What should states do to promote primary care?

Barbara Starfield, MD MPH

Maryland Health Care Commission task force on Health Care Access and Reimbursement

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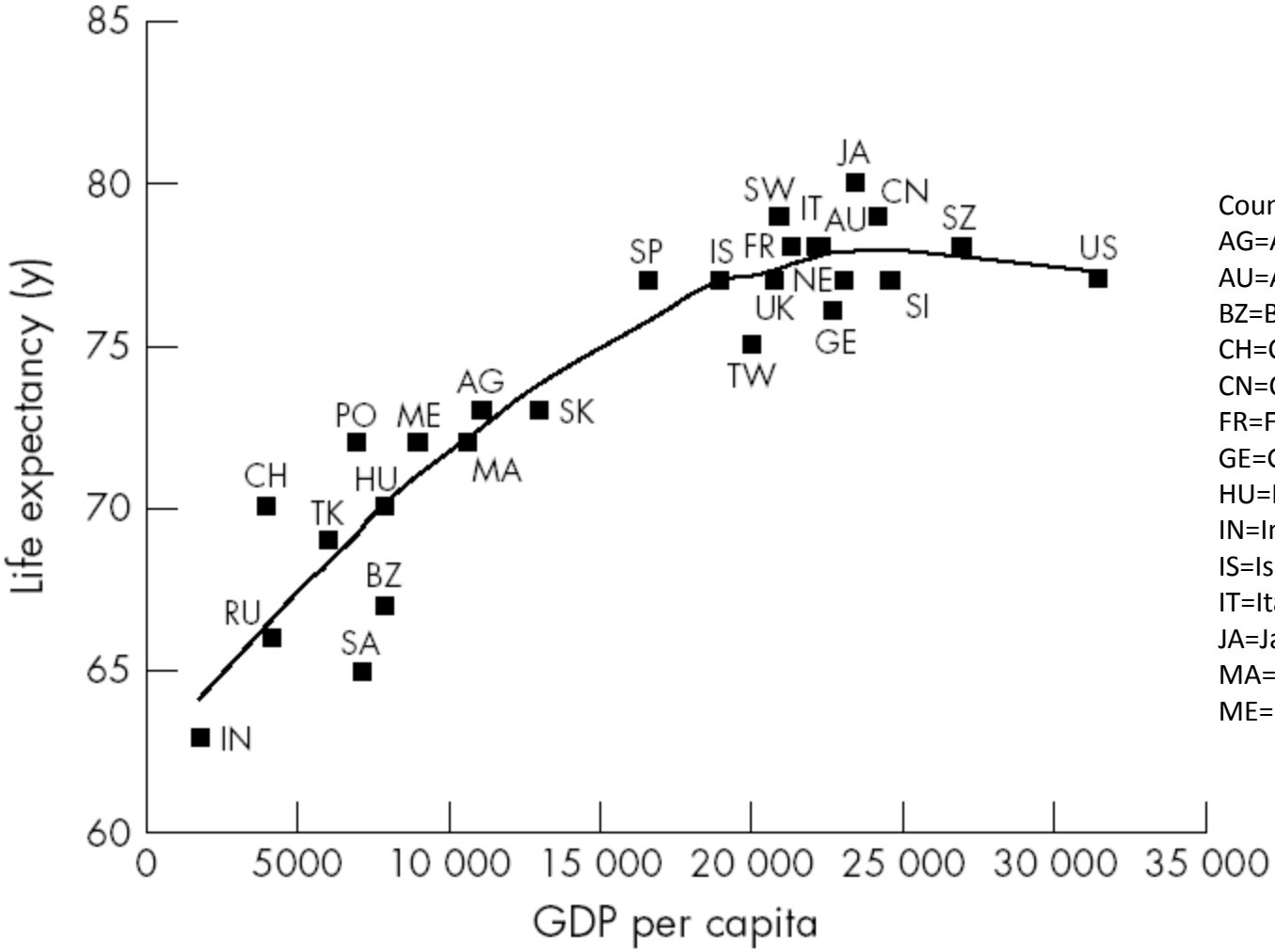
Life Expectancy Compared with GDP per Capita for Selected Countries



Country codes:

AG=Argentina
AU=Australia
BZ=Brazil
CH=China
CN=Canada
FR=France
GE=Germany
HU=Hungary
IN=India
IS=Israel
IT=Italy
JA=Japan
MA=Malaysia
ME=Mexico
NE=Netherlands
PO=Poland
RU=Russia
SA=South Africa
SI=Singapore
SK=South Korea
SP=Spain
SW=Sweden
SZ=Switzerland
TK=Turkey
TW=Taiwan
UK=United Kingdom
US=United States

Source: Economist Intelligence Unit. Healthcare International. 4th quarter 1999. London, UK: Economist Intelligence Unit, 1999.

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Why Is Primary Care Important?

Better health outcomes

Lower costs

Greater equity in health

GOOD PRIMARY CARE REQUIRES

--Health system POLICIES conducive to primary care practice

--Health services delivery that achieves the important FUNCTIONS of primary care

Key factors in achieving an effective health system in both developing and industrialized countries are:

- Universal financial coverage, under governmental control or regulation
- Efforts to distribute resources equitably (according to degree of need)
- No or low co-payments
- Comprehensiveness of services
- Skilled delivery attendants
- Immunization coverage

Sources: Starfield & Shi, Health Policy 2002; 60:201-18. Gilson et al. Knowledge Network on Health Systems. Commission on the Social Determinants of Health. Centre for Health Policy, University of Witwatersrand, 2007.

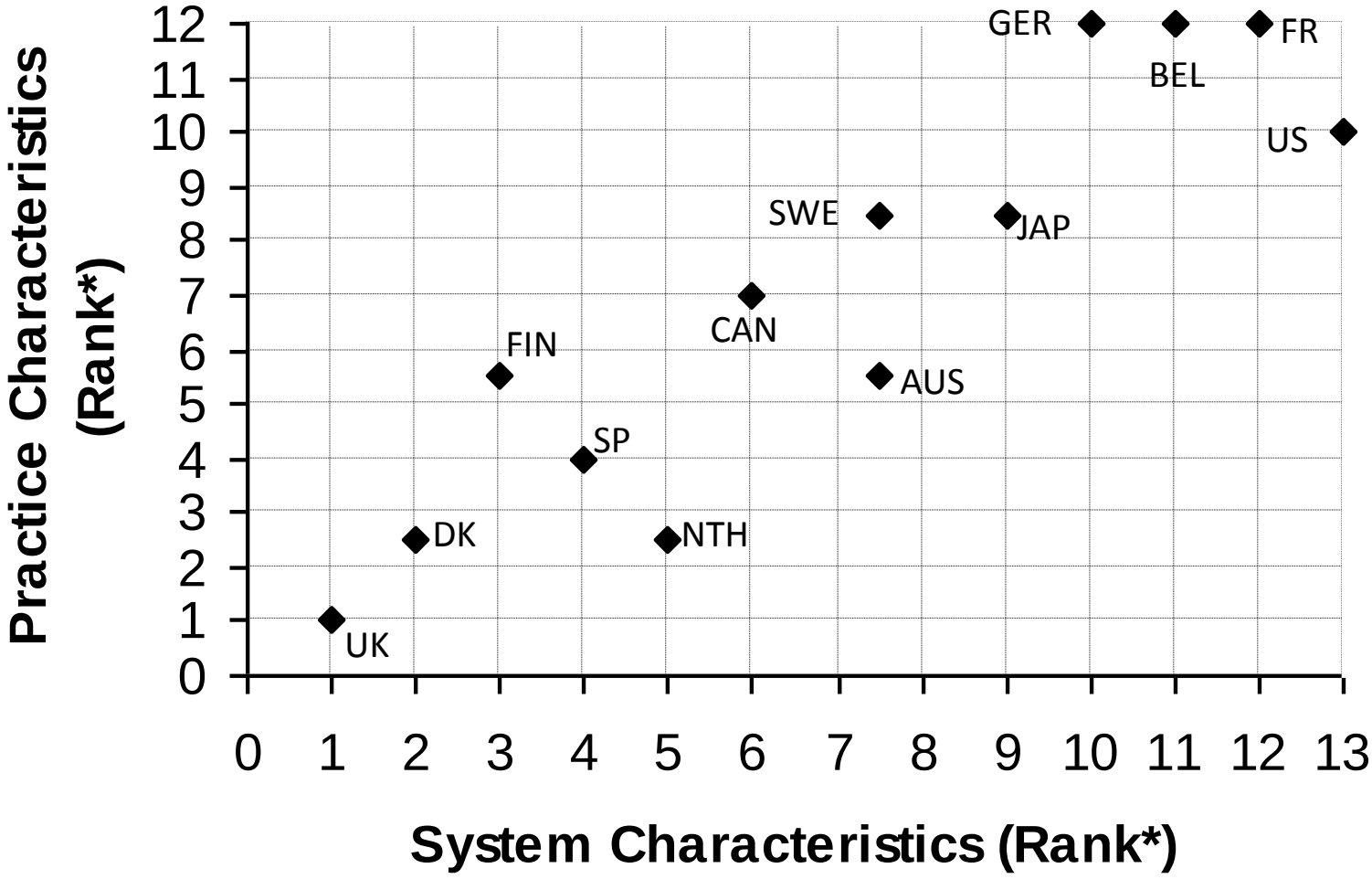
At the clinical level

--the critical structural features are Accessibility, mechanisms of Continuity/Information Systems, and Range of Services available in primary care.

--the critical process features are Problem Recognition on the part of practitioners (both for initial problems and for reassessment) and Utilization of primary care services, both over time and for new problems as they arise.

Together, these features achieve the evidence-based FUNCTIONS of primary care: First contact, Person-Focused (not disease focused) care over time, Comprehensiveness, and Coordination.

System (PHC) and Practice (PC) Characteristics Facilitating Primary Care, Early-Mid 1990s



*Best level of health indicator is ranked 1; worst is ranked 13; thus, lower average ranks indicate better performance.

Based on data in Starfield & Shi, Health Policy 2002; 60:201-18.

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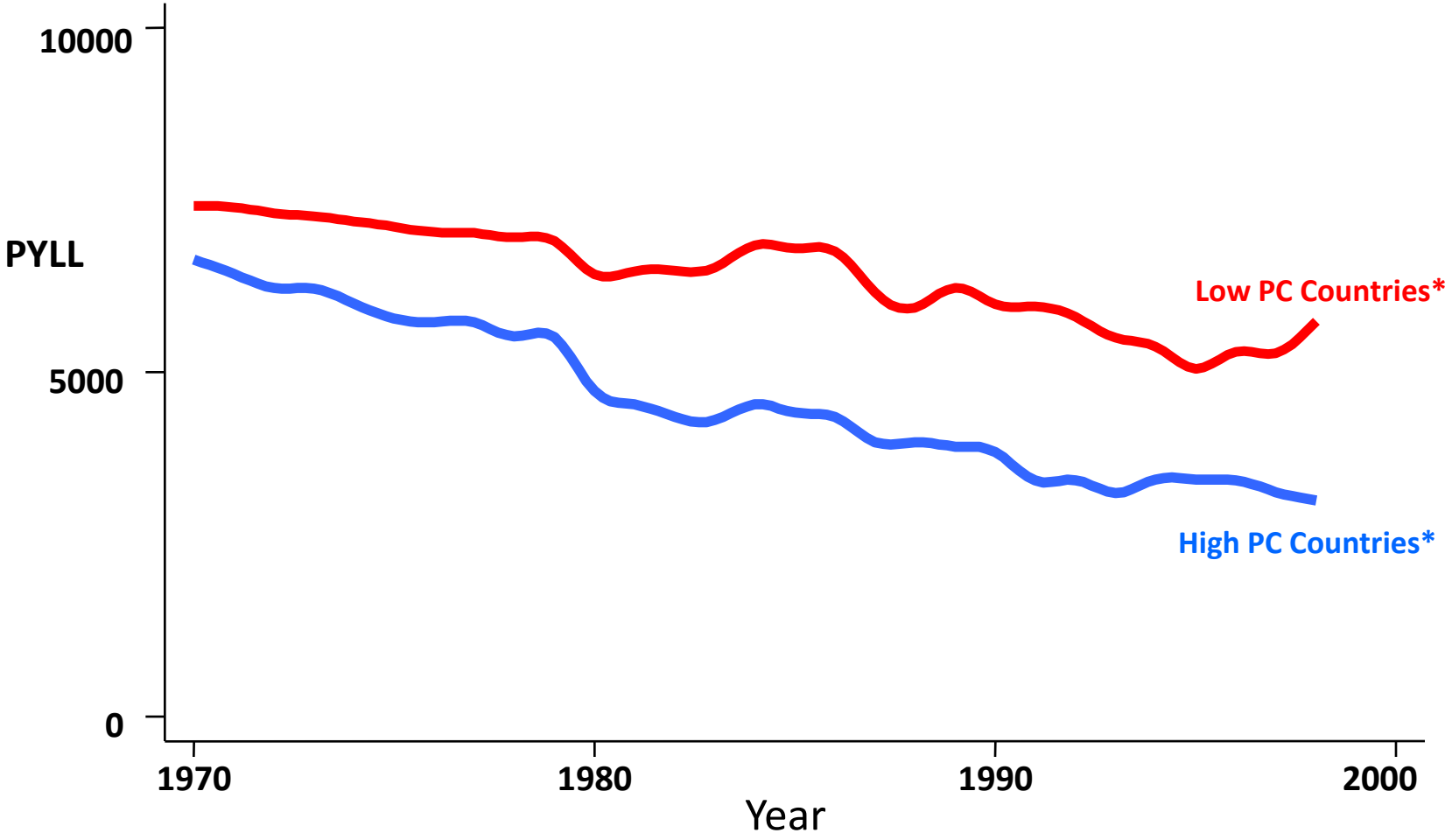
Primary Care Strength and Premature Mortality in 18 OECD Countries



*Predicted PYLL (both genders) estimated by fixed effects, using pooled cross-sectional time series design. Analysis controlled for GDP, percent elderly, doctors/capita, average income (ppp), alcohol and tobacco use. R^2(within)=0.77.

Source: Macinko et al, Health Serv Res 2003; 38:831-65.

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Many other studies done WITHIN countries, both industrial and developing, show that areas with better primary care have better health outcomes, including total mortality rates, heart disease mortality rates, and infant mortality, and earlier detection of cancers such as colorectal cancer, breast cancer, uterine/cervical cancer, and melanoma. The opposite is the case for higher specialist supply, which is associated with worse outcomes.

Source: Starfield B. www.pitt.edu/~super1/lecture/lec8841/index.htm

In 35 US analyses dealing with differences between types of areas (7) and 5 rates of mortality (total, heart, cancer, stroke, infant), the greater the primary care physician supply, the lower the mortality for 28. The higher the specialist ratio, the higher the mortality in 25.

Above a certain level of specialist supply, the more specialists per population, the worse the outcomes.

Controlled only for income inequality

Source: Shi et al, J Am Board Fam Pract 2003; 16:412-22.

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We know that

1. Inappropriate referrals to specialists lead to greater frequency of tests and more false positive results than appropriate referrals to specialists.
2. Inappropriate referrals to specialists lead to poorer outcomes than appropriate referrals.
3. The socially advantaged have higher rates of visits to specialists than the socially disadvantaged.
4. The more the training of MDs, the more the referrals.

A MAJOR ROLE OF PRIMARY CARE IS TO ASSURE THAT SPECIALTY CARE IS MORE APPROPRIATE AND, THEREFORE, MORE EFFECTIVE.

Source: Starfield et al, Health Aff 2005; W5:97-107 (http://content.healthaffairs.org/cgi/reprint/hlthaff.w5.97v1).
van Doorslaer et al, Health Econ 2004; 13:629-47;

Use of Specialists in the US

- Referral rates from primary care to specialty care in the US are HIGH.
- At least one-third and as many as three-fourths of visits to specialists are for routine follow-up.
- Percentage of people seen by a specialist in a year is high.

Sources: Forrest et al, BMJ 2002; 325:370-1. Valderas et al, submitted for publication 2007.

The Impact of Seeing Many Different Physicians

Controlling for morbidity burden

- The more different specialists seen, the higher the total costs, medical costs, diagnostic tests and interventions, and types of medication.
- The more DIFFERENT generalists seen, the higher the total costs, medical costs, diagnostic tests and interventions, and, to a lesser degree, number of types of medications.
- The more generalists seen (LESS CONTINUITY), the more the number of DIFFERENT specialists seen. The effect is independent of the number of generalist visits.

Source: Starfield et al, Ambulatory specialist use by patients in US health plans: correlates and consequences. Submitted 2008.

In New Zealand, Australia, and the US, an average of 1.4 problems (excluding visits for prevention) were managed in each visit. However, primary care physicians in the US managed a narrower range: 46 problems accounted for 75% of problems managed in primary care, as compared with 52 in Australia and 57 in New Zealand.

Source: Bindman et al, BMJ 2007; 334:1261-6.

Comprehensiveness in Primary Care

Wart removal	IUD insertion IUD removal Pap smear
Suturing lacerations	Tympanocentesis
Removal of cysts	Vision screening
Joint aspiration/injection Foreign body removal (ear, nose) Setting of simple fractures Sprained ankle splint	Age-appropriate surveillance Family planning Immunizations Smoking counseling
Remove ingrowing toenail	Hearing screening
Behavior/MH counseling	Home visits as needed
Electrocardiography	Nutrition counseling
Examination for dental status	OTHERS?

THE PROPOSED PC/MH (PATIENT-CENTERED MEDICAL HOME)

Electronic health Record

Patient centered (poorly conceptualized)

Question: DO THESE ‘ENHANCEMENTS’ IMPROVE PRIMARY CARE?

This requires evaluation.

Any evaluation of enhancements to clinical primary care must consider the extent to which they better achieve the evidence-based primary care functions:

--first contact for new needs/problems

--person (*not* disease) focused care (enhanced recognition of peoples' health problems)

--breadth of services

--coordination (enhanced problems/needs recognition over time

IS IT POSSIBLE TO EVALUATE PRIMARY CARE?

YES, but the TOOLS must address the evidence-based functions of primary care. Particularly missing from proposed evaluations is COMPREHENSIVENESS of care.

There is no such thing as a ‘primary care service’. There are only primary care functions and ‘specialty care’ functions. We know what the primary care functions are; they are evidence-based. Payment should be based on their achievement over a period of time. Any payment system that rewards specific services will distort the main purpose of medical care: to deal with health problems effectively, efficiently, and equitably.

WHAT STATES CAN DO

1. Advocate for policies conducive to primary care practice at the federal level: support for primary care training and practice; eliminate disparities in clinical earnings in primary care and secondary care; greater incentives for more equitable distribution of providers
2. Support financial incentives for primary care training by medical academia (medical school and residency)
3. (Continue to) Support financial incentives for loan repayment and practice in primary care
4. Provide bonuses for 'medical home' practices that achieve the functions of primary care, ESPECIALLY COMPREHENSIVENESS of care, including
   ---providing a wide range of types of services
   ---low case-mix adjusted referral rates
5. Insist that evaluations address primary care functions